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**GROUP 1700** 

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 04162004

Application Number: 722,420 Filing Date: November 28, 2000 Appellant(s): STROMBERG

Bryan Davidson For Appellant

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed July 9, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of claims.

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The statement of the status of claims contained in the brief is correct.

# (4) Status of Amendments After Final.

The amendment filed concurrently with the Appeal has been entered. The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

# (5) Summary of invention.

The summary of invention contained in the brief is correct.

#### (6) Issues.

The appellant's statement of the issues in the brief is correct.

# (7) Grouping of claims.

The rejection of claims 1-3, 7, 8 13 and 14 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

The rejection of claims 4-6, 9-12, 15 and 16 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

The rejection of claims 23 and 24 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

#### (8) Claims appealed.

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (9) Prior Art of record.

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The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

### **REFERENCES**

#### U.S Patents

5,959,124 TSAI

09-1990

5,645,687

AMBADY et al

07-1997

### **Foreign Patents**

81020828

**SWEDEN** 

12-1992

#### Other References

NIMMERFROH et al, UBERLEGUNGEN ZUM GROBTECHNISCHEN EINSATZ VON OZON ZUR ZELLSTOFFBLEICHE, Wochenslatt Fur Papierfabrikation, pp 860-868, 21-1992

# (10) New prior art.

No new prior art has been applied in this examiner's answer.

#### (11) Grounds of rejection.

The following grounds of rejection are applicable to the appealed claims.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by TSAI.

TSAI teaches bleaching chemical (kraft) pulp in a (DZED) bleaching sequence and teaches that parenthesis around the bleach stage (column 5, lines 45-47) indicates that there is no washing between stages. Thus Examples 8, 9 and 11 do not define over the bleach sequence of the instant process.

Claim 1-3, 7, 8, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over TZAI as applied to claim 1 above, and further in view of AMBADY et al.

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AMBADY et al teaches that there could be an extraction stage between the first chlorine dioxide state and ozone stage, see column 4, lines 39-67. It would have been obvious to the artisan to include an additional E-stage between the first D and Z stage of TSAI as taught by AMBADY et al to remove chlorinated lignins. Note AMBADY et al, column 4, lines 66-67, teaches that symbols in parenthesis indicate an absence of washing stages. Thus, if necessary, the (DZED) stages of TSAI, which are in parenthesis, would not include intermediate wash stages. Claim 2, is rejected as obviously the extraction stage of TSAI would increase the pH of the pulp greater than 6.0 as such is taught by AMBADY, column 4, lines 24-33.

Claims 4-6, 9-12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over TSAI in view of AMBADY as applied to claim 1 above, and further in view of ADMITTED PRIOR ART (specification, page 2, lines 19-25).

The ADMITTED PRIOR ART teaches that soda/anthraquinone is a well-known chemical pulping process. It would have been obvious to one of ordinary skill in the art that the pulp of TSAI could have been prepared using any well-known process, such as the soda/AQ process of the ADMITTED PRIOR ART.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over TSAI in view of AMBADY et al and the ADMITTED PRIOR ART (specification, page 2, lines 19-25) as applied to claims 4 above, and further in view of SWEDISH APPLICATION 81020828 or NIMMERFROH et al.

SWEDISH APPLICATION 81020828 or NIMMERFROH et al teach using an N stage in combination with an alkaline stage lowers the kappa number and the water requirements, see SWEDISH APPLICATION 81020828 (16) or NIMMERFROH et al, translation, page 6, line 7.

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It would have been obvious to use an N-stage with the extraction stage of TSAI and/or AMBADY et al to lower the water requirements and the final kappa number as taught by SWEDISH APPLICATION 81020828 or NIMMERFROH et al.

## (12) New ground of rejection.

This Examiner's Answer does not contain any new ground of rejection.

# (13) Response to argument.

The argument that Example 57 shows a D(ZEo)D sequence in which there is washing between the Eo and D stages is not convincing as Examples 8 and 9 are shown by TSAI to have no washing between stages as indicated by parenthesis around stage (DZED). This nomenclature is taught by TSAI to have no washing between stages, see column 5, lines 44-47. The argument that the parenthesis is just to discuss the sequence discussed in the text is not convincing as all the other Examples "discuss" sequences in the text without having to use parenthesis. A better explanation is that TSAI teaches that washes **may be** employed between selected stages, see column 4, lines 44-48 (emphasis added). Examples 8 and 9 are Examples when washing was not used between stages. It is also noted that TSAI teaches, column 2, lines 58-67, that the "washing between stages is not deemed to be a stage, but rather is in the nature of dilution of the aqueous phase of the pulp". Thus the claimed term "without washing" does not exclude the dilution stages of TSAI.

Appellant has argued that AMBADY et al fails to overcome the deficiencies of TSAI is not convincing as AMBADY et al is being relied on to show that the symbols in parenthesis indicate an absence of an intermediate washing stage. Thus it is obvious from the teachings that the symbols, e.g. (DZED), in the parenthesis of TSAI (Examples 8 amd 9) indicate an absence of

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intermediate wash stages. It is noted that Appellant has not shown any unexpected results by

eliminating the wash stages. From the teachings of TSAI these wash stages are not necessary,

but merely preferred. It would have been obvious to eliminate the wash stages and there

function of diluting the pulp, see TSAI, column 2, lines 58-67.

The argument that SWEDISH Application has wash stages between bleach stages is not

convincing as such stages could be eliminated as they are preferred, but not necessary as taught

by TSAI. Appellant has argued that NIMMEROTH et al raises the pH in the E-stage to no lower

than 10. However, claims 23 and 24 are not limited to any pH.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully subpolitted,

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Steve Alvo
Primary Evaminer

Primary Examiner

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msa

4/16/2004

Conferees

Patrick Ryan

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